

Name _____ Date _____

Putting the Pieces Together

Analyzing and Interpreting Data

Vocabulary

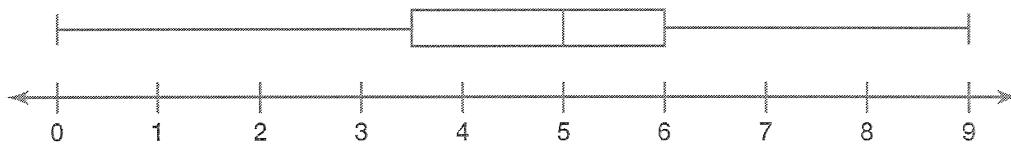
For each problem situation, identify whether a stem-and-leaf plot or a side-by-side stem-and-leaf plot would be appropriate. Explain your choice for each.

1. For a history project, Roberto is comparing the ages of the U.S. Presidents at inauguration and at death.
2. During the Summer Olympic Games, Karen keeps track of the number of gold medals won by the various countries participating.

Problem Set

Construct a box-and-whisker plot of each given data set and include any outliers. Calculate the most appropriate measure of center and spread for each data set based on the data distribution.

1. The data are 0, 2, 3, 4, 4, 5, 5, 5, 6, 6, 8, and 9.



The most appropriate measure of center is the mean, and the most appropriate measure of spread is the standard deviation because the data are symmetric. The mean is 4.75 and the standard deviation is approximately 2.35.

2. The data are 1, 6, 9, 12, 14, 15, 17, 17, 17, 18, 18, 18, 19, and 20.

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Two data sets are given in a side-by-side stem-and-leaf plot. Calculate the most appropriate measure of center and spread for each set based on the data distribution.

7.

Data Set 1		Data Set 2
8 7 5 3	0	3 4 6 9
8 4	1	1 4 5
2	2	5
0	3	2

Key: 2|5 = 25

For each data set, the most appropriate measure of center is the median and the most appropriate measure of spread is the IQR, because the data are skewed right.

For Data Set 1, the median is 11 and the IQR is 14.

For Data Set 2, the median is 11 and the IQR is 15.

8.

Data Set 1		Data Set 2
9 8 7	1	8 9
8 7 5 5 3	2	0 2 4 4 6 9
2 1 0	3	1 3

Key: 2|0 = 20

9.

Data Set 1		Data Set 2
9 9	5	9
7 5 1	6	5 8
8 6 2	7	0 4
2 0	8	1 1 5 7

Key: $6|5 = 65$

10.

Data Set 1		Data Set 2
	0	9
9	1	4
8 3	2	2 5
9 5 1	3	3 6
5 5 4 3 2 0	4	0 0 1 1 1 2

Key: $1|4 = 14$

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11.

Data Set 1		Data Set 2
9 9 9 8 8 8	3	7 9
8 6 5 2	4	0 3 4 5 8
5 1	5	2 5 5 6 6
0	6	1 2

Key: $4|0 = 40$

12.

Data Set 1		Data Set 2
7 5 3 3 2 1	10	1 1 3 5 8 8 9
8 5 2	11	1 3 5
9 4	12	5
2	13	3
0	14	

Key: $12|5 = 125$